

Attorney Docket No.: DC-0190
Inventors: Hamilton and Stanton
Serial No.: 10/089,475
Filing Date: August 12, 2002
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This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-8 (canceled).

Claim 9 (currently amended): A method for identifying agents which increase functional cell surface expression of a mutant cystic fibrosis transmembrane conductance regulator (CFTR) protein comprising:

(a) exposing cells transfected with a genetic construct to an ~~agent~~ anthracycline, wherein the genetic construct comprises a cDNA encoding a mutant human CFTR protein having a deletion of the phenylalanine at amino acid position 508 ($\Delta F508$) and a cDNA of an EGFP reporter gene linked at the 5' end to the cDNA encoding the mutant human CFTR protein and wherein said cDNAs are under the regulation of the proximal human CFTR promoter region;

(b) measuring CFTR expression or activity levels or trafficking of CFTR to the cell membrane in the exposed cells; and

(c) comparing measured CFTR expression levels or activity or trafficking of CFTR to the cell membrane in the exposed cells to CFTR expression or activity levels or trafficking of CFTR to the cell membrane in cells not exposed to the ~~agent~~ anthracycline, wherein an increase in CFTR expression or activity levels or trafficking of CFTR to the cell membrane in the exposed cells as compared to the unexposed cells is indicative of the ~~agent~~

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anthracycline being useful in increasing functional cell surface expression of a $\Delta F508$ mutant CFTR protein.

Claims 10-11 (canceled).